METEOROLOGICAL OBSERVATIONS TAKEN ON THE NILE BETWEEN CAIRO AND THE FIRST CATARACT, DURING JANUARY AND FEBRUARY, 1873.

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SAN FRANCISCO, CAL., July 26, 1875.

To the Secretary of the American Philosophical Society:

DEAR SIR:

I send you two sheets of Meteorological Observations which I made during January and February, 1873, on the Nile, thinking that they might be considered of sufficient interest to find a place among the printed Proceedings of the American Philosophical Society.

While the general character of the climate of that country is well known, I have not heard of there having been published any regular series of observations of the wet bulb from there; and the large number of tourists who annually visit that river, the majority of whom are Americans, makes facts concerning it of more than usual interest.

I had had made in Cairo, before starting up the river, a box two feet square, four sides of which were of lattice blinds, so that the instruments, when suspended in it, were perfectly protected from the direct rays of the sun, while the wind passed freely through it. One side of the box was provided with double doors, one or both of which could be opened or closed at pleasure. The box was placed on a table on the upper deck of the boat, and securely fastened to it. The bulbs were about ten feet from the water. Usually there was an awning above. From frequent experiments I found that there was no difference between the readings of the instruments when the doors of the box were open or closed.

The principal instruments were two sensitive identical Thermometers, which read alike when the bulbs were dry. They were made by James Green, of New York, and were of the best construction. There was also a minimum Thermometer, but not of so nice a construction.

The reductions were made by means of the tables in Profession Papers of the Corps of Engineers, No. 15, a copy of which is in the library of the Society.

The boat went up the river as far as Assouan, at the foot of the first Cataract, and six degrees of latitude south from Cairo, and returned.

Yours very truly,

R. S. WILLIAMSON,

Lient.-Col. United States Engineers.